

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. - 15. (Canceled)

16. (previously presented) The method of claim 20, wherein the sensor acquires MEG data.

17. (previously presented) The method of claim 20, wherein the sensor acquires EEG data.

18. (previously presented) The method of claim 20, wherein the sensor acquires ECG data.

19. (previously presented) The method of claim 20, wherein the sensor acquires MCG data.

20. (currently amended) A method of evaluation comprising:  
acquiring an electromagnetic physiological signal with a sensor on a subject;

performing a source reconstruction of the electromagnetic physiological signal via a signal processing circuit in communication with said sensor, with said circuit including a computer system with a processor and a memory, the computer system being configured to support multiple parallel threads of execution with one thread being a measurement module and a second thread being a source reconstruction module;  
using the feeding source reconstruction data through a feedback loop to the measurement module to modify the acquisition analysis of a new electromagnetic physiological signal; and  
displaying source reconstruction results overlayed onto anatomical data of said patient.